

IN THE CLAIMS

Please CANCEL claim 4 without prejudice to or disclaimer of the recited subject matter.

Please AMEND claims 1 and 9 as follows. A marked up copy of the claims showing the changes is attached in Appendix A. For the Examiner's convenience, all claims currently pending in this application have been reproduced below:

27/02 Sub B1

Please no longer claim claims 4, 5, 6, 7, 8, 10-18

Claim 1

1. (Amended) A mini-environment pod device for a micro-device manufacturing apparatus, said device comprising:

- a cassette being able to hold a substrate;
- a pod providing an inner space to store said cassette, wherein said pod includes an electromagnetic shield for inhibiting leakage of electromagnetic waves outside the apparatus through said pod when said pod is installed on a surface of the apparatus, and said pod is in a conductive relationship with the surface of the apparatus when said pod is installed on the surface of the apparatus; and
- a lid which fits into an opening of said pod, said lid providing an isolated environment in the inner space.

2. A device according to Claim 1, wherein said mini-environment pod is a front opening type having the opening in the front of the pod.

Q3

3. A device according to Claim 1, wherein said mini-environment pod is a bottom opening type having the opening in the bottom of the pod.

Q4

5. A device according to Claim 1, wherein said electromagnetic shield comprises wire mesh provided on or within walls of said pod.

6. A device according to Claim 1, wherein said electromagnetic shield comprises metal coatings provided on walls of said pod.

7. A device according to Claim 1, wherein said electromagnetic shield comprises shielding materials provided in walls of said pod.

8. A device according to Claim 1, wherein said electromagnetic shield has a shielding capacity of under 100 dB (μ V) within frequencies of about 9 kHz to about 400 MHz.

Sub B2

9. (Amended) A micro-device manufacturing apparatus for processing substrates, said apparatus comprising:

a shielded chamber having an opening covered with a door;

a mini-environment pod, having an open end, containing a cassette for holding a substrate and including a lid covering the open end, said pod being installed over the

opening of said chamber, wherein said mini-environment pod has an electromagnetic shield for inhibiting leakage of electromagnetic waves outside the chamber through said pod when said pod is installed on said chamber, and said electromagnetic shield is in a conductive relationship with said shielded chamber when said pod is installed on said chamber;

a door opener which opens the door of said chamber and the lid of said pod when said mini-environment pod is installed on said chamber; and

A4
a processing system, contained in said chamber, which processes a wafer in said chamber.

10. An apparatus according to Claim 9, wherein said chamber has a grounded conductive portion around the opening, which contacts said pod when said pod is installed on said chamber.

11. An apparatus according to Claim 9, further comprising an optical system in said chamber for exposing the wafer with radiation.

12. An apparatus according to Claim 9, further comprising kinematic couplings which mount the mini-environment pod on said manufacturing apparatus.

13. An apparatus according to Claim 9, wherein said mini-environment pod is a front opening type having the opening in the front of the pod.

14. An apparatus according to Claim 9, wherein said min-environment pod is a bottom opening type having the opening in the bottom of the pod.

15. An apparatus according to Claim 9, wherein said electromagnetic shield comprises wire mesh provided on or within walls of said pod.

16. An apparatus according to Claim 9, wherein said electromagnetic shield comprises metal coatings provided on walls of said pod.

17. An apparatus according to Claim 9, wherein said electromagnetic shield comprises shielding materials provided in walls of said pod.

18. An apparatus according to Claim 9, wherein said electromagnetic shield has a shielding capacity of under 100 dB (μ V) within frequencies of about 9 kHz to about 400 MHz.

94

19. A semiconductor manufacturing method, comprising:

providing a min-environment pod device, which comprises (i) a cassette being able to hold a plurality of wafers, (ii) a pod providing an inner space to store the cassette, wherein the pod has an electromagnetic shield, and (iii) a lid which fits into an opening of the pod, the lid providing an isolated environment in the inner space;

providing a micro-device manufacturing apparatus, which comprises (i) a shielded chamber having an opening covered with a door, (ii) a door opener which opens the door of the chamber and the lid of the pod when the pod is installed on the apparatus and (iii) a processing system which processes the wafer in the chamber, wherein the electromagnetic shield of the pod is in a conductive relationship with the chamber when the pod is installed on the chamber;

installing the mini-environment pod onto the manufacturing apparatus;

opening both the door of the chamber and the lid of the pod to expose the wafer to the inside atmosphere of the chamber;

picking up one of the wafers from the cassette and carrying the wafer to the processing system; and

processing the wafer with the processing system.

20. A method according to Claim 19, wherein said processing step comprises exposing the wafer to radiation using a projection optical system.